L 42979-65
ACCESSION NR: AP5009428

of the isotherms and when tributyl phosphate is used is determined by the process

$$UO_2^{2+}aq + 2NO_3^- aq + 2PyOx_{org} \rightleftharpoons UO_2(NO_3)_2 \cdot 2PyOx_{org}.$$

To evaluate the extracting capacity of the various α-alkylpyridine-N-oxides, the equilibrium constants of this process were calculated. It was shown that these oxides are much more effective extracting agents for $UO_2(NO_3)_2$ than tributyl phosphate.

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR, Novosibirsk (Institute of Inorganic Chemistry, Siberian Branch, Academy of Sciences of the SSSR)

SUBMITTED: 10Jul64 ENCL: 00 SUB CODE: IC

NO REF SOV: 005 OTHER: 003

Card 2/2

L 11321-65 EPA(s)-2/EWT(m)/EEP(c)/EPR/EWP(t)/T Pc-4/Pr-4/Ps-4/Pt-10 IJP(c)
WW/RM
ACCESSION NR: AP4041169 S/0062/64/000/006/1090/1095

AUTHOR: Fisher, L. E.; Kotlyarevskiy, I. L.; Domnina, Ye. S.; Tretyakova, Z. F.

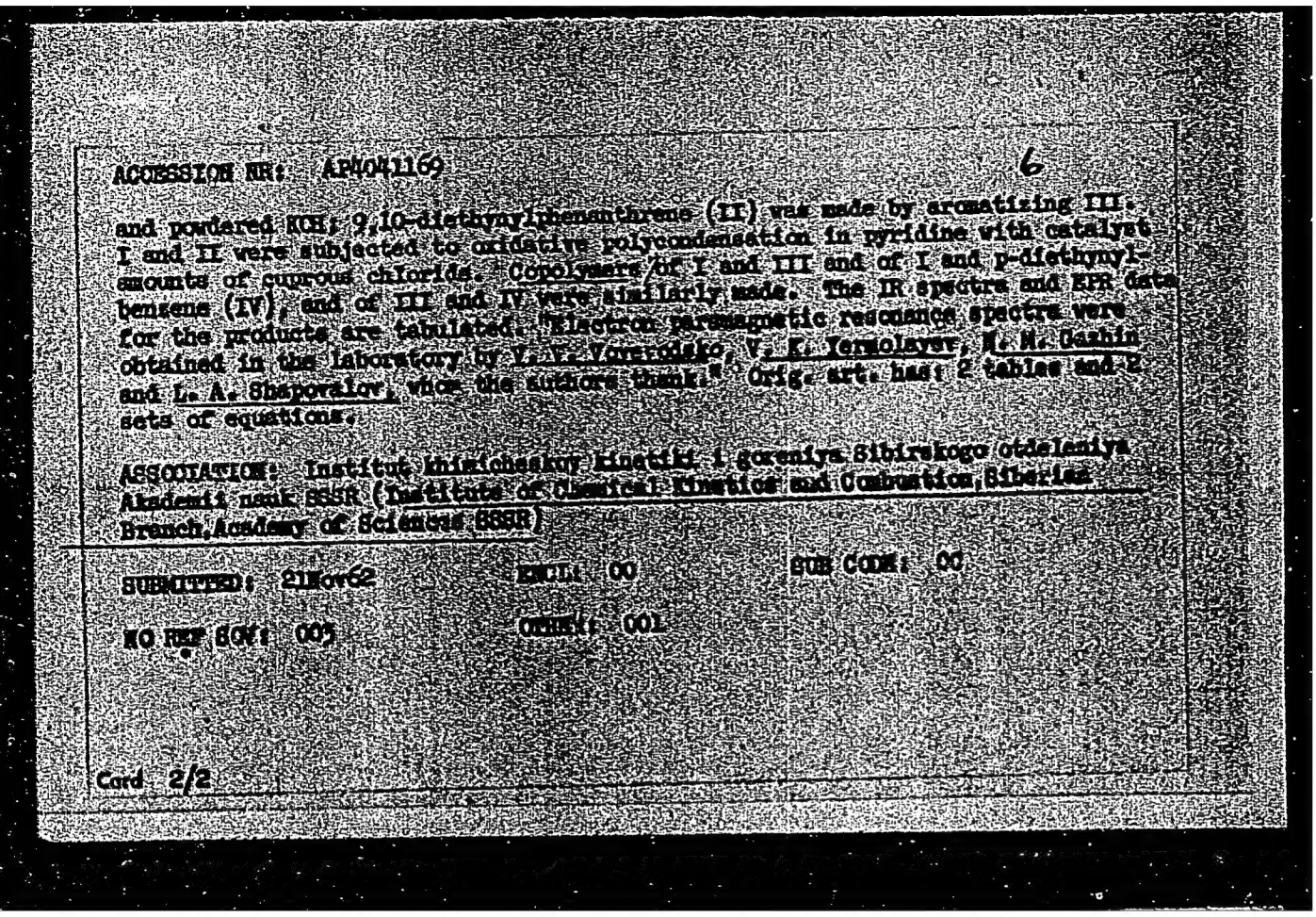
TITLE: Highly unsaturated polymers. Communication 9. Synthesis and polycondensation of diacetylenic derivatives of phenanthrene

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 6, 1964, 1090-1095

TOPIC TAGS: diacetylenic polymer, diacetylenic phenanthrene derivative, synthesis, polycondensation, unsaturated polymer, acetylenic oligomer, conjugated acetylenic polymer, conjugated polymer, organic semiconductor, semiconducting polymer

ABSTRACT: As a continuation of research to determine the effects of monomer structure on the physical properties of oligomers, oligomers were synthesized in which conjugation was retained or interrupted, and copolymers were synthesized in which units having interrupted conjugation alternated with conjugated units. 9,10-bis(methoxy)-9,10-diethynyl-9,10-dihydrophenanthrene (I) was made from 9,10-diethynyl-9,10-dihydroxy-9,10-dihydrophenanthrene (II) and dimethyl sulfate.

Card 1/2



ACCESSION NR: AP4041169 6

and powdered KOH; 9,10-diethynylphenanthrene (II) was made by aromatizing III. I and II were subjected to oxidative polycondensation in pyridine with catalyst amounts of cuprous chloride. Copolymers of I and III and of I and p-diethynylbenzene (IV), and of III and IV were similarly made. The IR spectra and EPR data for the products are tabulated. Electron paramagnetic resonance spectra were obtained in the laboratory by L. V. Vorozhtsko, V. K. Yermolayev, M. M. Dashin and L. A. Shaporenko, whom the authors thank." Orig. art. has: 2 tables and 2 sets of equations.

ASSOCIATION: Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Chemical Kinetics and Combustion, Siberian Branch, Academy of Sciences SSSR)

SUBMITTED: 21Nov62 ENCL: 00 SUB CODE: OC

NO REF SOV: 005 OTHER: 001

Card 2/2

L 8575-65 [illegible] ESD(a)-5/AFWL/ESD(dp)/ESD(t)
RAEM(c) [illegible]

S/0062/64/000/008/1543/1545

ACCESSION NR: AP4044711

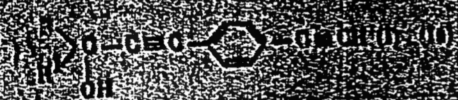
AUTHOR: Fisher, L. B.; Kotlyarevskiy, I. L.; Andriyevskaya, E. K.

TITLE: Mannich reaction with p-diethynylbenzene derivatives

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 8, 1964, 1543-1545

TOPIC TAGS: Mannich reaction, monohydric acetylenic alcohol, secondary amine, formaldehyde, polyethynylpolyarene, organic semiconductor

ABSTRACT: A study has shown the feasibility of using Mannich's method to condense monohydric acetylenic alcohols (I) with formaldehyde and secondary amines. This research is part of an investigation of the chemical properties of monomers for highly unsaturated polyethynyl-polyarenes. The following alcohols were condensed with formaldehyde and a secondary amine (diethylamine or piperidine):



(I; II) $R = R' = (CH_2)_5$; (Ia) $R = R' = CH_3$; (Ib) $R = R' = C_6H_5$.

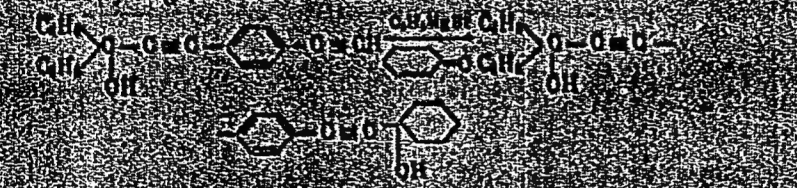
Card 1/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825410006-5"

L 8573-65
ACCESSION NR: AP4044711

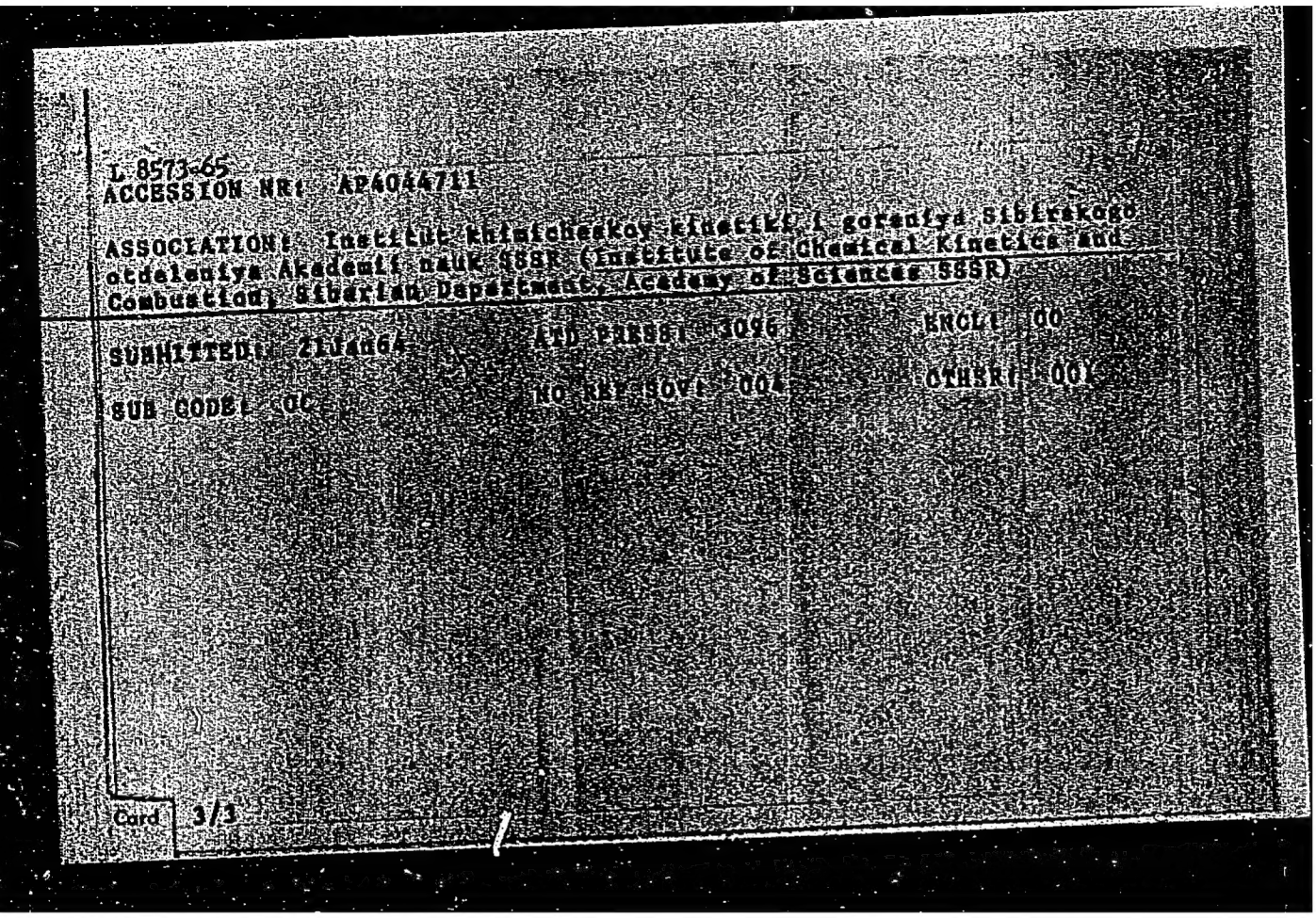
The following condensation products, acetylenic amino alcohols, were obtained:

In the presence of cuprous chloride the condensation proceeded 20 to 30 times as fast as in its absence and the yield was higher. The acetylenic alcohols I also readily undergo the Iotsich reaction. This was exemplified by the condensation of Ia with cyclohexanone in the presence of ethylmagnesium bromide to form VIII:



Orig. art. has: 3 formulas.

Card 1/3



L 8573-65
ACCESSION NR: AP4044711

ASSOCIATION: Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Chemical Kinetics and Combustion, Siberian Department, Academy of Sciences SSSR)

SUBMITTED: 21Jan64 ATD PRESS: 3096 ENCL: 00

SUB CODE: OC NO REF SOV: 004 OTHER: 001

Card 3/3

L 12453-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL/ASD(a)-5/AFWL/
ESD(dp)/ESD(t) WW/JW/RM
ACCESSION NR: AP4047399 S/0062/64/000/010/1854/1860

AUTHOR: Kotlyarevskiy, I. L.; Terpugova, M. P.; Andriyevskaya, Ye. K.

TITLE: Highly unsaturated polymers. Communication 10. Polymers with azo groups in the backbone

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1964, 1854-1860

TOPIC TAGS: organic semiconductor, semiconducting polymer, unsaturated polymer

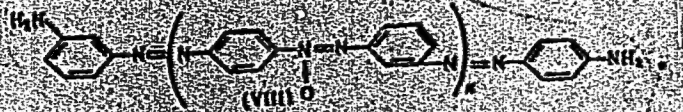
ABSTRACT: Oxidative polycondensation of a number of aromatic diamines has yielded highly unsaturated polymers and copolymers having alternating azo groups in the backbone. The following diamines were used: p-phenylenediamine, benzidine, m-phenylenediamine, or chrysoidine alone; or m- and p-phenylenediamine; or benzediamine and m- or p-phenylenediamine; or chrysoidine and p-phenylenediamine or benzidine to form the copolymers. The polycondensation was carried out in the presence of pyridine and CuCl. The polymers and copolymers were of

Card 1/3

L 12453-65
ACCESSION NR: AP4047399

the following types:

(I)



(VIII)

The polymer (I) from p-phenylenediamine was a dense, black, shiny solid, insoluble in organic solvents. It does not melt or change its appearance up to 500C and burns with difficulty. The polymer from benzidine was a brown substance which does not melt up to 500C. The polymer from m-phenylenediamine is a black bulky powder whose

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L 12453-65
ACCESSION NR: AP4047399

properties are otherwise similar to those of I. The properties of the copolymers are intermediate between those of the polymers. All polymers and copolymers, except the benzidine polymer and the benzidine—p-phenylenediamine copolymer, show catalytic activity and all give an EPR signal. Orig. art. has: 12 formulas and 1 table.

ASSOCIATION: Institut khimicheskoy kinetiki i gorenlya Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Chemical Kinetics and Combustion, Siberian Branch, Academy of Sciences SSSR)

SUBMITTED: 05Jan63 ENCL: 00 SUB CODE: GC, OC

NO REF SOV: 002 OTHER: 003 ATD PRESS: 3127

Card 3/3

L 22449-65 EWT(m)/SPF(c)/EWP(j)/T Pc-4/Pr-4 RM S/0062/64/000/011/2073/2074

ACCESSION NR: AP5000486

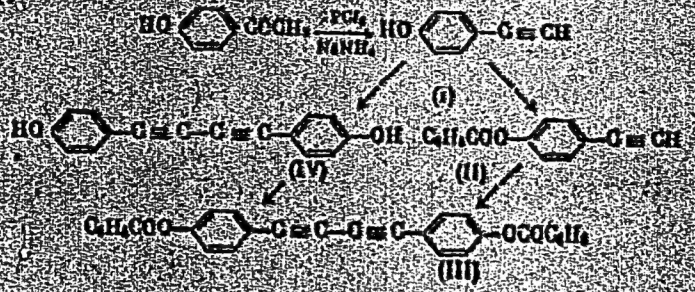
AUTHOR: Kolyarovskiy, I. L.; Bardamova, M. I.

TITLE: Synthesis of p-oxyphenylacetylene

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 11, 1964, 2073-2074

TOPIC TAGS: paraoxyphenylacetylene, synthesis, paraoxyphenylacetylene property, paraoxyphenylacetylene derivative, paraoxyphenylacetylene polymerization

ABSTRACT: The solubility of mono- and polyacetylenes with functional groups might be increased by introducing a hydroxy-group attached to the ring into the monomer. Synthesis of the title product and its derivatives proceeded according to the schematic presentation:



Card 1/2

L 22145-65
ACCESSION NR: AP5000486

P-oxyphenylacetylene is a crystalline compound which polymerizes rapidly, darkens, liquefies and finally solidifies under formation of polymer lamellae. The structure of the compounds obtained was confirmed by IR spectra. Yields were: 46% for the title product, 50% for the p-benzoyl derivative, and quantitative yields for the 2 other derivatives. Orig. art. has: 4 formulas.

ASSOCIATION: Institut khimicheskoy kinetiki i gorenlya Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Chemical Kinetics and Combustion of the Siberian Division, Academy of Sciences, SSSR)

SUBMITTED: 12Mar64 ENCL: 00 SUB CODE: GC, GP

NR REF SOV: 000 OTHER: 002

Card 2/2

L 58910-65 EWT(m)/EPF(c)/EWP(j)/T/EWA(c) Pc-4/Pr-4 RPL JW/RM

ACCESSION NR: AP5017064 UR/0289/65/000/001/0151/0152
547.234

AUTHOR: Kotlyarevskiy, I. L.; Terpugova, M. P.; Mityushova, A. A.

TITLE: Synthesis of diphenylpicrylhydrazyl

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 1, 1965, 151-152

TOPIC TAGS: diphenylpicrylhydrazyl, diphenylhydrazine, ESR spectrum

ABSTRACT: Diphenylpicrylhydrazyl, used as a standard in electron spin resonance studies, is synthesized from diphenylhydrazine by the well-known method of S. Goldschmidt and K. Renn (Ber., 55, 630, 1922). The authors of the present article found that diphenylhydrazine (II) is obtained in good yield from nitrosoamine (I) and zinc dust by a somewhat modified procedure of E. Fischer (Ann. 190, 174, 1878), which they describe. The reaction is:

Card 1/2

L 58910-65

ACCESSION NR: AP5017064

From 20 g of nitrosoamine and 32 g of zinc dust, 5.2 g of diphenylhydrazine are obtained as a yellow oil which does not crystallize; this was then used to prepare diphenylpicrylhydrazyl by S. Goldschmidt's technique. Orig. art. has: 1 formula.

ASSOCIATION: Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya AN SSSR, Novosibirsk (Institute of Chemical Kinetics and Combustion, Siberian Branch, AN SSSR)

SUBMITTED: 17Jan64 ENCL: 00 SUB CODE: OC

NO REF SOV: 001 OTHER: 002

Card 2/2

L 38622-65 EWT(m)/EPF(c)/EPR(j)/EWA(c) Pc-4/Pr-4 RPL RM
ACCESSION NR: AP5003105 S/0062/65/000/002/0322/0330

AUTHOR: Vasil'yeva, Ye. D.; Kotlyarevskiy, I. L.; Fayyershteyn, Yu. M.

TITLE: Pyridine bases derived from vinylacetylene. Part 8. Catalytic condensation of acetylenic alcohols with ketones and ammonia

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1965, 322-330

TOPIC TAGS: pyridine derivative, vinylacetylene derivative, acetylenic alcohol, catalytic condensation, pyridine synthesis, alkylpyridine, phenylpyridine

ABSTRACT: The condensation of aliphatic or phenyl-substituted acetylenic alcohols with aliphatic ketones and ammonia was studied experimentally as a way of preparing alkyl-phenyl substituted pyridines. Ammonia, ketones and acetylenic carbinols were reacted at 390–400C initial temperature in the presence of a $Cd_3(PO_4)_2/Al_2O_3$ catalyst. The condensation of ketones and ammonia was also studied to identify various byproducts obtained during the reaction of carbinols. Studies of the reaction products comprised ultraviolet and infrared analysis, formation of picrates, oxidation, decarboxylation of the carboxylic acids produced and the measurement of various physical properties. 2-Methyl-4-phenylbuten-1-yn-3 and 2-phenylbuten-1-yn-3 ol either did not react with ammonia and acetone or gave mainly polymeric products, respectively, whereas

Card 1/2

L 38622-65
ACCESSION NR: AP5008108

methylphenylethynylcarbinol, which forms 2,6-dimethyl-3-phenylpyridine by a published mechanism (Ya. A. AN SSSR, Otd. khim. n., 718, 1959); ammonia-acetone condensation gave 2,4,6-trimethylpyridine as a byproduct. Dimethylethynylcarbinol, ammonia and methylethylketone gave 2,3,5,6-tetramethylpyridine and 2,3-dimethyl-6-ethylpyridine, and as byproducts an unidentified compound $C_{10}H_{15}N$, 2,3,6-trimethylpyridine and pentamethylpyridine. Byproducts were shown to be formed by reaction of ammonia with ketones present as initial reagents or produced by decomposition of acetylenic alcohol by a reversed Favorskiy's reaction. The catalyst was shown to reach maximum activity after aging and a simultaneous decrease in Cd concentration to trace amounts. The physical measurements were carried out by Ye. K. Vasil'yev. Orig. art. has: 2 tables, 1 figure and 10 formulas.

ASSOCIATION: Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Chemical Kinetics and Combustion, Siberian Branch, Academy of Sciences SSSR)

SUBMITTED: 04Mar63 ENCL: 00 SUB CODE: OC

NO REF SOV: 006 OTHER: 003

Card 2/2

SHERGINA, S.I.; ZANINA, A.S.; TROTSENKO, Z.P.; KOTLYAREVSKIY, I.L.

Chemical properties of diethynlarenes. Izv. AN SSSR. Ser. khim. no.3:574-578 '65. (MIRA 18:5)

1. Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya AN SSSR.

FISH[illegible], I.L.

"Highly unsaturated polymers. Report No.11: Monoatomic and diatomic alcohols, derivatives of p-diethynylbenzene. Izv. AN SSSR. Ser. khim. no.4:692-697 '65. (MIRA 18:5)
1. Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya AN SSSR.

L 61299-65 EWT(m)/EPF(c)/EWA(d)/EWP(t)/T WW/RM
ACCESSION NR: AP5020980 UR/0195/65/006/004/0765/0766 25
541.7 B

AUTHOR: Boldyrev, V. V.; Shmidt, I. V.; Pigmenko, V. I.; Shvartsberg, M. S.; Kotlyarevskiy, I. L.; Andriyevskiy, V. N.; Komarov, V. F.

TITLE: Effect of additions of organic compounds with conjugate bonds on the rate of thermal decomposition of solid substances

SOURCE: Kinetika i kataliz, v. 6, no. 4, 1965, 766

TOPIC TAGS: thermal decomposition, solid kinetics, conjugate bond system, silver compound, topochemistry

ABSTRACT: It has been observed that certain organic compounds with a system of conjugate multiple bonds exert an effect on the rate of thermal decomposition. Tests were made of the effect of heterophase additions (5% on the weight of oxalate) of conjugate alpha, omega-diarylpolyenes (I)-(IV) on the rate of thermal decomposition of silver oxalate at 133C. A figure is given which shows a plot of the degree of conversion against time. Results show that additions of the above sub-

Card 1/2

L 61299-65

ACCESSION NR: AP5020990

stances bring about just as sharp a decrease in the decomposition rate as do the inorganic additives ordinarily employed for this purpose. The effect of organic compounds on the rate of topochemical processes is evidently connected with the special characteristics of the redistribution of the electrons between the additive and the oxalate. Orig. art. has: 1 figure.

ASSOCIATION: Institute khimicheskoy kinetiki i goreniya SO AN SSSR (Institute of Chemical Kinetics and Combustion of the Siberian Branch AN SSSR)

SUBMITTED: 20Mar65 ENCL: 00 SUB CODE: GC, FD

NR REF SOV: 004 OTHER: 004

Card 2/2

BARDAMOVA, M.I.; SHISHMAKOVA, T.G.; KOTLYAREVSKIY, I.L.

4-Hydroxy-4'-ethynylazobenzene. Izv. AN SSSR. Ser. khim. no.9: 1674-1675 '65. (MIRA 18:9)

1. Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya AN SSSR.

KOTLYAREVSKIY, I.L.; SHVARTSBERG, M.S.; VOLGINA, G.I.; VASILEVSKIY, S.F.

Synthesis of acetylenic derivatives of diphenyl oxide and metabitolyl. Izv. AN SSSR. Ser. khim. no.9:1704-1706 '65. (MIRA 18:9)

1. Institut khimicheskoy kinetiki i goreniya AN SSSR.

L 65177-65 EWT(m)/EPA(s)-2/EWT(m)/EPF(c)/EWP(j)/T/EWA(h)/EWA(c) IJP(c)/
RPL JW/AT/RM
ACCESSION NR: AP5022150 UR/0364/65/001/009/1145/1149
621.315.592:547

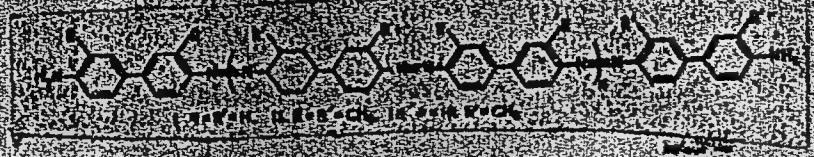
AUTHOR: Demidova, G. N.; Pirkhalava, R. N.; Rozenshteyn, L. D.; Terpugova, M. P.; Kotlyarevskiy, I. L.

TITLE: Absorption spectra, electrical conductivity, and photoconductivity of polyazopolyarenes

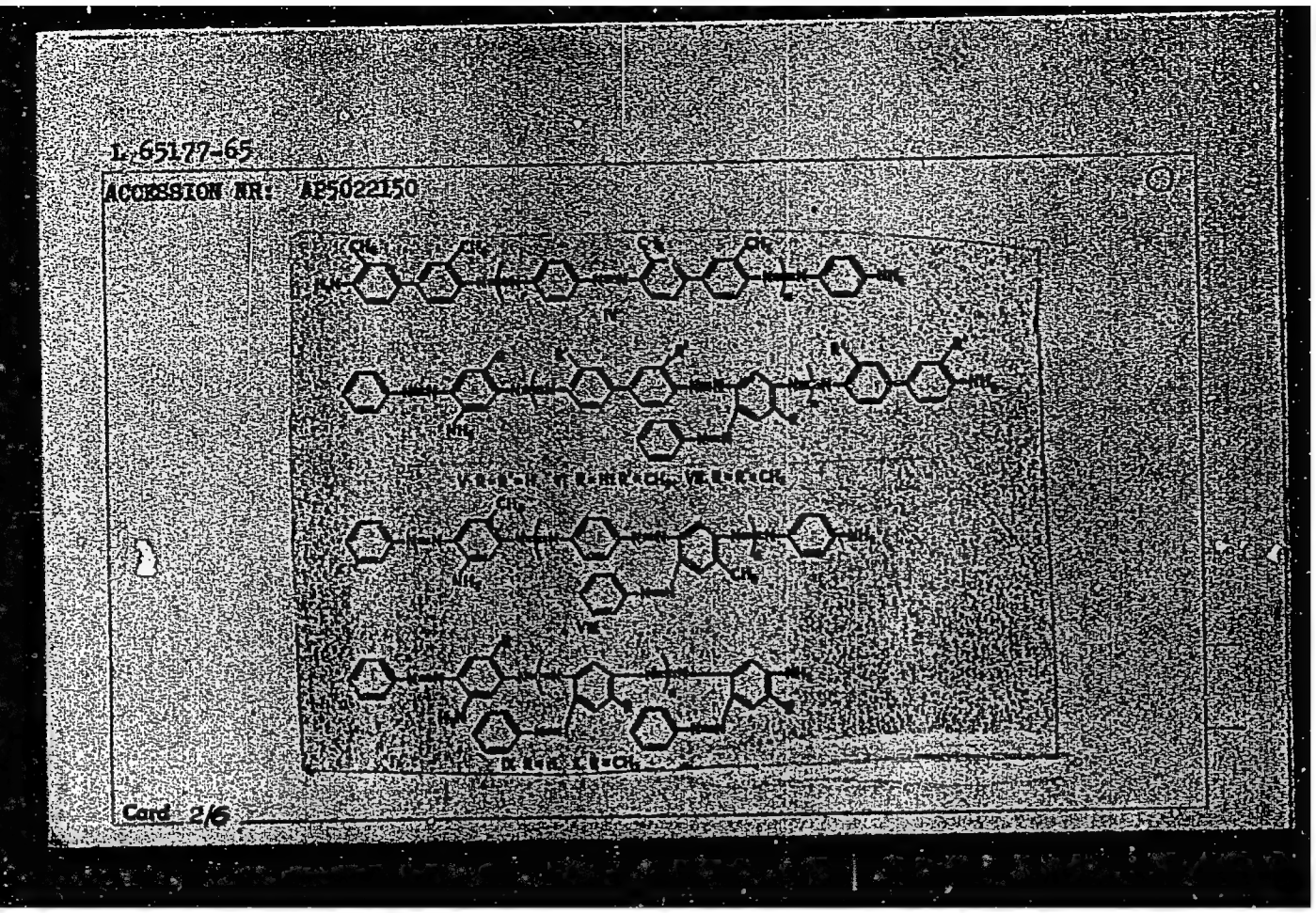
SOURCE: Elektrokhimiya, v. 1, no. 9, 1965, 1145-1149

TOPIC TAGS: organic semiconductor, organic photoconductor, photoconductivity, electric conductivity, conjugated polymer

ABSTRACT: Electrical conductivity, photoconductivity and absorption spectra have been measured for a number of polyazopolyarenes:



Card 1/6



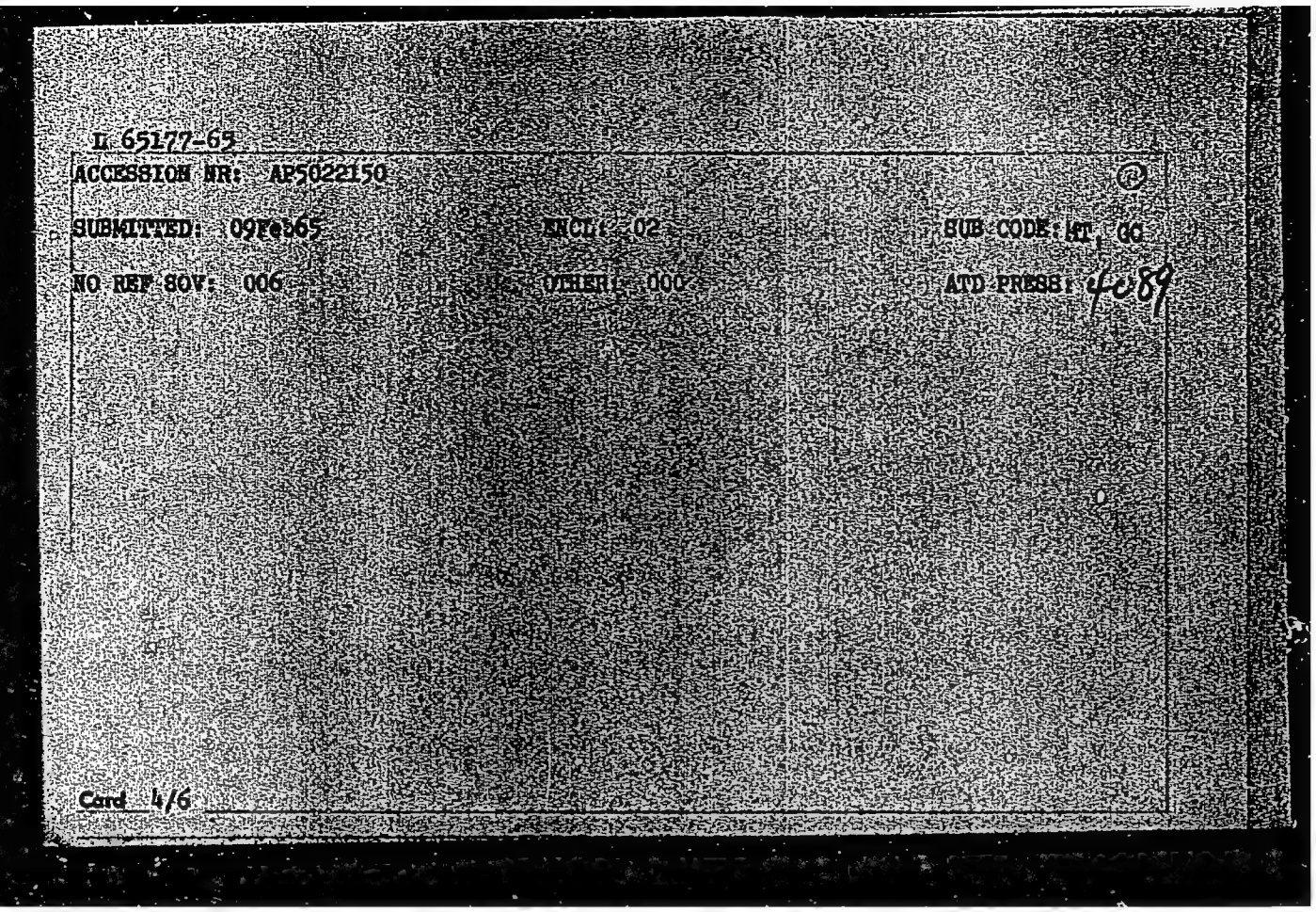
L 65177-65

ACCESSION NR: AP5022150

The materials were prepared by oxidative polycondensation or copolycondensation of aromatic diamines in the presence of cuprous chloride catalyst. The study of these compounds was prompted by the varying character of conjugation among them. The properties of the compounds are shown in Table 1 of the Enclosure. Electrical measurements were carried out with molded specimens. The temperature dependence of electrical conductivity obeyed an exponential law. For some of the compounds the log σ versus 1/T curves showed a break and hence two values of E and σ_0 are given for them in Table 1. Photoconduction was studied with film specimens. In the field range used (up to 5×10^4 v/cm) the photocurrent obeyed Ohm's law. For most films the lux-ampere characteristic was linear. The photocurrent was an exponential function of temperature. The spectral regions of photoconductivity corresponded to spectral regions of optical absorption. Comparison of absolute values of photocurrent for the polymers revealed a sharp drop in photocurrent on going to compounds with decreasing conjugated chain length. Orig. art. has: 6 figures, 1 table, and 5 formulas. [BM]

ASSOCIATION: Institut poluprovodnikov Akademii nauk SSSR (Institute of Semiconductors, Academy of Sciences SSSR); Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Chemical Kinetics and Combustion, Siberian Department, Academy of Sciences SSSR)

Card 3/6



L 65177-65

ACCESSION NR: AP5022150

SUBMITTED: 09Feb65 ENCL: 02 SUB CODE: MT, GC

NO REF SOV: 006 OTHER: 000 ATD PRESS: 4089

Card 4/6

L 65177-65
ACCESSION NR: AP5022150

ENCLOSURE: 01

Table 1. Properties of polydiopolyarenes

Diamines	Polyarene	mp	Solubility	Electrical conductivity data: E_1, ev	σ_{21}, ohm^{-1} cm^{-1}	E_2, ev	σ_{21}, ohm^{-1} cm^{-1}
Benzidine	I	Does not melt until 300C	Partial in dimethylformamide	0.65	$1.15 \cdot 10^{-4}$	0.78	2.9
o-Tolidine	II	"	Partial in acetone, benzene, chloroform, dioxane			1.4	$3.65 \cdot 10^{-2}$
o-Tolidine benzidine	III	280C	Partial in chloroform, dioxane	0.52	$1.2 \cdot 10^{-3}$	1.6	$1.82 \cdot 10^{-11}$
o-Tolidine p-phenylenediamine	IV	249C	Partial in acetone, chloroform, benzene			2.1	$1.15 \cdot 10^{-11}$
Benzidine, chrysoidene	V	352C	Partial in chloroform, acetone			2.35	$1.15 \cdot 10^{-12}$

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L 65177-65
ACCESSION NR: AP5022150

ENCLOSURE: 02

Table 1. Properties of polyacenylenes (Cont.)

Monomer	Polymer type	mp, °C	Solubility	Electrical conductivity data: E_a, ev	σ_{25}, ohm^{-1} cm^{-1}	Photoconductivity data: E_a, ev	σ_{25}, ohm^{-1} cm^{-1}
o-Tolaldine, chloroformate	VI	266C	Partial in chloroform, acetone	0.84 (1156	1.6·10^{-5}	2.1	1.8·10^{11}
o-Tolaldine, methylchloroformate	VII	218—217	Partial in benzene, acetone, chloroform, dimethylformamide			2.45	5·10^{12}
p-Phenylenediamine	VIII	209—213	Partial in benzene, acetone, chloroform, dimethylformamide			3.1	2·10^{12}
Chrysaldamine	IX	216—218	In benzene, xylene, acetone, chloroform			3.5	1.1·10^{11}
Methylchrysaldamine	X	152	In benzene, xylene, acetone, chloroform			3.18	6.2·10^{15}

Card 5/6

L 11245-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6002105 SOURCE CODE: UR/0062/65/000/011/2077/2079

AUTHOR: Kotlyarevskiy, I. L.; Zanina, A. S.; Shergina, S. I.; Kushta, V. C.

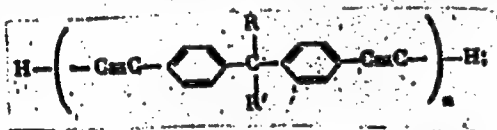
ORG: Institute of Chemical Kinetics and Combustion of the Siberian Department of the Academy of Sciences SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Electrophysical properties of certain polyethynylpolyarenes

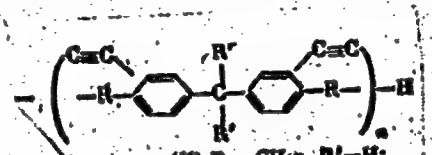
SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 11, 1965, 2077-2079

TOPIC TAGS: organic semiconductor, semiconducting polymer, pyrolisis

ABSTRACT: A study has been made of the electrical conductivity, its temperature dependence, and conduction type of polyethynylpolyarene oligomers I to X and of the pyropolymers produced by heat treatment of these oligomers at 300, 400, and 500C:



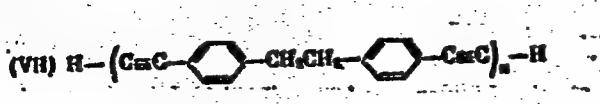
(I) R = R' = H; (II) R = H; R' = CH$_3$;
(III) R = R' = CH$_3$; (IV) R = CH$_3$; R' = C$_2$H$_5$;



(V) R = CH$_3$; R' = H;
(VI) R = OCH$_3$; R' = CH$_3$

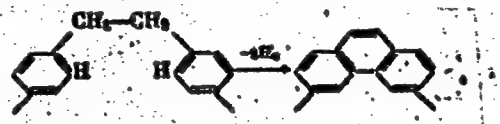
UDC: 537.311+541.6+547.362

Card 1/3

(VII) 

(VIII) $k'=k''=1$; (IX) $k'=1$; $k''=2$; (X) $k'=k''=2$

All the polymers were p-type. All of compounds I to II, when heat treated up to 300C, remained typical dielectrics at room temperature. Activation energy for conduction increased with the degree of branching. After heat treatment of I to VI to 400C and especially to 500C, properties typical of semiconductors appeared owing to the formation via triple bonds of three-dimensional cross-linked structures. However, even in this case, the conductivity of I to VI did not exceed 10^{-7} to 10^{-11} mho/cm owing to breaks in their conjugated systems. In contrast, oligomer VII, after heat treatment at 500C, irreversibly acquired a high conductivity (10^{-4} mho/cm) at an activation energy of 0.1 ev, a thermoelectric power of 37 μv/c, and a nonlinear volt-ampere characteristic. The typical semiconducting properties of VII heat treated at 500C were attributed to cyclization:



L 11245-66
ACC NR: AP6002105

Of oligomers VIII to X, X has the most interesting properties (conductivity of the 500C pyropolymer, 10^{-4} mho/cm). It is concluded that preparative efforts aimed at obtaining polyethynylpolyarenes with predetermined properties (good solubility and conductivity) should be directed toward the synthesis of oligomers similar to VII and having substituents in the methylene bridge. Orig. art. has: 1 table and 1 figure. [SM]

SUB CODE: 11, 20/ SUBM DATE: 04Mar65/ ORIG REF: 003/ ATD PRESS: 4173

Card 3/3

DEMIDOVA, G.N.; PIRTSKHALAVA, R.N.; ROZENSHTEYN, L.D.; TITUSOVA, N.F.; KOTLYAREVSKIY, I.I.

Absorption spectra, electric conductivity, and photoconductivity of polyazo polyarenes. Elektrokhimiia 1 no.9:1145-1149 S '65. (MIRA 18:10)

1. Institut poluprovodnikov AN SSSR i Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya AN SSSR.

BOLDYREV, V.V.; SHMIDT, I.V.; PIS'MENKO, V.I.; SHVARTSBERG, M.S.; KOTLYAREVSKIY, I.L.; ANDRIYEVSKIY, V.N.; KOMAROV, V.F.

Effect of additions of organic compounds with conjugated bonds on the rate of thermal decomposition of solids. Kin. i kat. 6 no.4: 766 Jl-Ag '65. (MIRA 18:9)

1. Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya AN SSSR.

L 14706-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6002106 SOURCE CODE: UR/0062/65/000/011/2079/2081

39
13

AUTHORS: Shergina, S. I.; Kotlyarevskiy, I. L.; Zanina, A. S.

ORG: Institute for Chemical Kinetics and Combustion, Siberian Branch of the Academy of Sciences SSSR (Institut khimicheskoy kinetiki i goreniya, Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Polyacetylene compounds, derivatives of di-, tri-, and tetraphenylethylene

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 11, 1965, 2079-2081

TOPIC TAGS: polymer, organic chemistry, conjugated polymer, organic synthesis process, acetylene

ABSTRACT: To extend the investigations of the authors (Izv. AN SSSR. Ser. khim. 1963, 2197) and in particular to study the properties of conjugated polymers, the following polyacetylene monomers were synthesized: 4,4'diethynylstilbene I, 1,1,2-tris-(p-ethynylphenyl)ethylene II, and 1,1,2,2-tetrakis-(p-ethynylphenyl)ethylene III. The initial stages of the synthesis consist of the acetylation of a hydrocarbon which contains a double bond between phenyl nuclei. A reaction scheme for the synthesis is presented. Oxidative polycondensation of the monomers I, II, and III in presence of cuprous chloride yielded the corresponding oligomers. The latter gave a narrow intensive EPR signal of $\simeq 10^{18}$ unpaired spins per gram and had an electrical

UDC: 542.91+547.362

Card 1/2

L 14706-66

ACC NR: AP6002106 O

resistance of $\simeq 10^{14}$ ohm cm. The yields, melting points, and IR absorption of the C≡C and ≡C-H bonds for the synthesized monomers are listed. Orig. art. has: 3 equations.

SUB CODE: 07/ SUBM DATE: 04Mar65/ ORIG REF: 001/ OTH REF: 001

BVK
Card 2/2

L 22340-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6009802 SOURCE CODE: UR/0062/66/000/002/0360/0362

AUTHOR: Shishmakova, T. G.; Bardamova, M. I.; Kotlyarevskiy, I. L.

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department of the Academy of Sciences, SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Synthesis of vinylacetylene aromatic hydrocarbons from unsaturated ketones

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1966, 360-362

TOPIC TAGS: aromatic ketone, aromatic hydrocarbon, alkyne, polycondensation

ABSTRACT: The stabilizing effect on aromatic vinylacetylenes of introducing a phenyl radiacal in the vinyl group and of substituting the monophenyl with a diphenyl group were investigated. Mono- and divinylacetylene derivatives of aromatic hydrocarbons were synthesized by reacting unsaturated aromatic ketones with PCl_5 and $NaNH_2$. Thus 1-biphenylylbutene-1-ine-3 (I) was synthesized from p-phenylbenzalacetone and 1,4-bis(2'-phenylbutene-1'-ine-3'-yl-1')benzene (II), from

Card 1/2

UDC: 542.91+547.362

Card 2/2

L 24312-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6009795 SOURCE CODE: UR/0062/66/000/002/0302/0308

AUTHOR: Kotlyarevskiy, I. L.; Shvartsberg, M. S.; Vasilevskiy, S. F.; Andriyevskiy, V. N.

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department of the Academy of Sciences (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk)

TITLE: Highly unsaturated polymers. Report 13. Polynuclear noncondensed diethynylarenes

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1966, 302-308

TOPIC TAGS: polymer, polynuclear hydrocarbon, aromatic hydrocarbon, alkyne, condensation reaction, polymerization, polycondensation, solubility

ABSTRACT: Reactions were run to confirm that the introduction of methyl groups or of an oxygen bridge in the p-polyphenylene segment of a diethynylarene molecule increases its solubility, thus permitting the synthesis of diacetylenes containing a greater number of rings. The following compounds were synthesized: 1^1, 2^4-diethynyl-1^4, 2^3-dimethylbiphenyl, 1^1, 4^4-diethynyl-1^4, 2^3, 3^4, 4^3- tetramethyl-p-

Card 1/2

UDC: 547.362+541.6

L 24312-66

ACC NR: AP6009795

quadriphenyl, and 4-ethynyl-4'-(p-ethynylphenoxy)biphenyl. Polymers of these compounds were obtained by oxidative polycondensation in alcohol-pyridine with a polycuprous chloride complex as catelyst. Condensation could not be effected in aqueous-alcohol or aqueous-acetone solutions. The polymers obtained were partially soluble in benzene. Orig. art. has: 1 figure.

SUB CODE: 07/ SUBM DATE: 090ct63/ ORIG REF: 003/ OTH REF: 006

Card 2/2 FV

L 24298-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6009801 SOURCE CODE: UR/0062/66/000/002/0358/0360

AUTHOR: Kotlyarevskiy, I. L.; Shergina, S. I.; Zanina, A. S. 40 39 B

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department of the Academy of Sciences, SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Preparation of diacetylene derivatives of 1,2-diphenylethane and 1,4-diphenylbutane

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1966, 358-360

TOPIC TAGS: aromatic hydrocarbon, alkyl benzene, polycondensation, polymer, solubility

ABSTRACT: The effect of substituents in the ethylene bridge of 4,4'-diethynyldiphenylethane-1,2 (I) on the solubility of polymers obtained by oxidative polycondensation of the corresponding monomers was investigated. α,β-dimethyldibenzyl and analogous compounds with methyl, ethyl and n-propyl substituents on the dimethyl group were acetylated, chlorinated and treated with PCl_5 and $NaNH_2$ to form the corresponding diacetylenic derivatives of I. Increasing the size of the substituent

Card 1/2 UDC: 542.91+547.362

L 24298-66

ACC NR: AP6009801

increased the solubility of the polymers formed by heating the monomers in pyridine in the presence of oxygen and cuprous chloride: a 10% colloidal solution in cyclohexane of the polymer was obtained from the monomer in which the dimethyl had n-propyl substituents. However, the polymer obtained from 1,4-bis(4'-ethynylphenyl)butane was insoluble. Orig. art. has: 2 tables and 2 figures.

SUB CODE: 07/ SUBM DATE: 05Jul65/ OTH REF: 002

Card 2/2 FV

L 23278-66 EWT(m)/EWP(j) IJP(c) RM
ACC NR: AP6012532 SOURCE CODE: UR/0062/66/000/003/0527/0533 B 41 42

AUTHOR: Shvartsberg, M. S.; Kotlyarevskiy, I. L.; Andriyevskiy, V. N.; Vasilevskiy, S. F.

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department of the Academy of Sciences SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Highly unsaturated polymers. Communication 14. Poly[bis-(butadiynyl)arenes]

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 3, 1966, 527-533

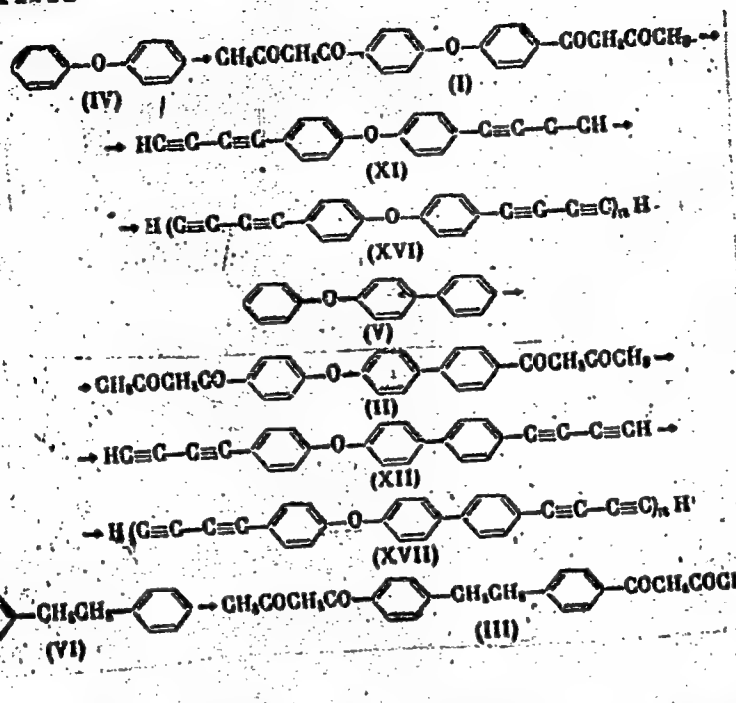
TOPIC TAGS: organic semiconductor, semiconducting polymer, polyacetylene, polyphenylene

ABSTRACT: New poly[bis(butadiynyl)arene] oligomers have been synthesized as part of a systematic investigation of the effect of structure on the electrical properties of conjugated polymers. The oligomers were prepared as follows:

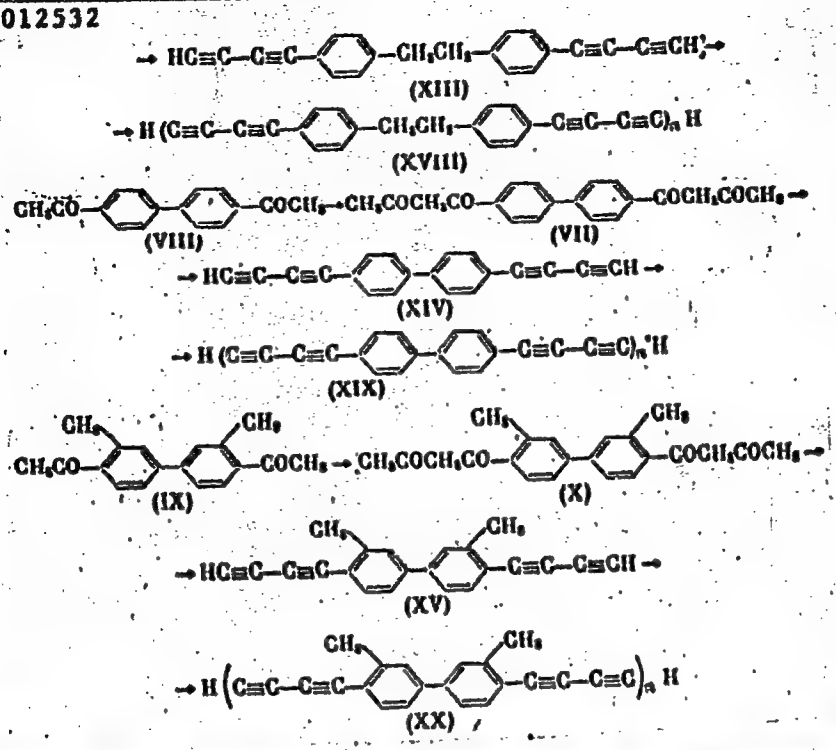
Card 1/4 UDC: 542.952+547.362

L 23278-66

ACC NR: AP6012532



Card 2/4



(XIII)

(XVIII)

(VIII) (VII)

(XIV)

(XIX)

(IX) (X)

(XV)

(XX)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825410006-5"

L 23278-66
ACC NR: AP6012532

Preparation of tetraketones I, II, III, VII and X and of tetraacetylenes XI, XII, XIII, XIV, and XV is described in the source. The tetraacetylenes were subjected to oxidative polycondensation in pyridine in the presence of cuprous chloride. Oligomers XVI—XX were brown to black powders. EPR data are given. [Electrical properties are not given in this article]. Orig. art. has: 1 table. [SM]

SUB CODE: 07/ SUBM DATE: 04Nov63/ ORIG REF: 005/ OTH REF: 003
ATD PRESS: 4231

Card 4/4 ULR

L 23866-66 EWT(m)/EWP(j)/T LJP(c) WW/RM

ACC NR: AP6014409 SOURCE CODE: UR/0062/66/000/004/0713/0720

AUTHOR: Terpugova, M. P.; Kotlyarevskiy, I. L.; Andriyevskaya, E. K.

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department of the Academy of Sciences SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Highly unsaturated polymers. Communication 15. Synthesis and some physical properties of polyazopolyarenes

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 4, 1966, 713-720

TOPIC TAGS: organic semiconductor, semiconducting polymer, polyazopolyarene, oxidative polycondensation, electric property

ABSTRACT: New homo- and co-polymeric polyazopolyarenes have been prepared and their physical and electrical properties investigated. This work was part of a systematic study of the effect of the structure of highly unsaturated polymers on their properties. The polymers had the general formula,

$$H_2N—Ar—N(=N—Ar'—N=N—Ar—N)_n=N—Ar'—NH_2.$$

Card 1/2

L 23866-66
ACC NR: AP6014409

3

where Ar and Ar' may be identical or different. The homo- and co-polymers (listed in the source) were prepared by oxidative polycondensation of aromatic diamines in pyridine solution in the presence of CuCl. The diamines used were o-tolidine, bis(p-aminophenyl)methane, and 4,4'-diaminostilbene. In addition, o-phenylenediamine was used, which should not form straight-chain polymers, and (p-aminophenyl)acetylene, which should form polymers containing both azo and butadiyne groups in the backbone. Butadiyne groups should form cross-links on heating, thereby improving electrical conductivity. These diamines and (p-aminophenyl)acetylene were homopolymerized and copolymerized with each other and with p-phenylenediamine, benzidine, and chrysoidine. The polymer structures were confirmed by elemental analysis and IR spectroscopy, and showed an EPR signal. Elemental analysis and IR spectra revealed partial oxidation to form =N→O bonds. Branched homo- and co-polymers were fusible and more soluble in chloroform, tetrahydrofuran, acetone, and dioxane than the infusible [straight-chain] polymers. The room temperature conductivity of all the polymers was low, 10^{-13} to 10^{-14} mho/cm, but rose rapidly with temperature, reaching 10^{-9} to 10^{-7} mho/cm for some of the polymers at 200—250C. Some of the polymers exhibited a very high activation energy for conduction, 2—3.5 ev. Orig. art. has: 3 tables and 1 figure. [SM]

SUB CODE: 07, 11/ SUBM DATE: 18Nov63/ ORIG REF: 002/ OTH REF: 004
ATD PRESS: 4246
Card 2/2 dda

L 28441-66 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6017878 SOURCE CODE: UR/0062/66/000/005/0902/0908

AUTHOR: Kotlyarevskiy, I. L.; Zanina, A. S.; Shergina, S. I.; Loboda, L. I.

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department, Academy of Sciences SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Highly unsaturated polymers. Communication 16. Polyacetylene compounds, derivatives of di-, tri-phenylmethane and diphenylethane

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 5, 1966, 902-908

TOPIC TAGS: organic semiconductor, semiconducting polymer, heat resistant polymer, polyacetylene, polyarylene, oligomer

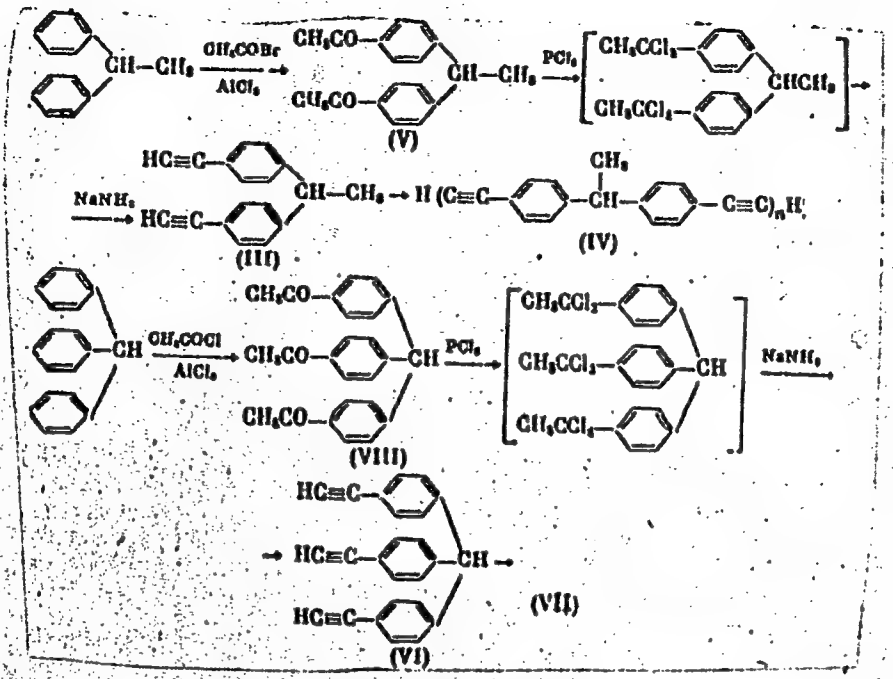
ABSTRACT: New highly unsaturated oligomers IV and VII (see below) having alternating arylene and diacetylene groups in the backbone were prepared which combine high heat resistance and solubility in some organic solvents. It is noted that such oligomers are of practical interest, even if their electrical conductivity proves to be low, for such applications as heat resistant dielectrics. Oligomers IV and VII were prepared as follows:

Card 1/3

UDC: 547.362+542.952

L 28441-66

ACC NR: AP6017878

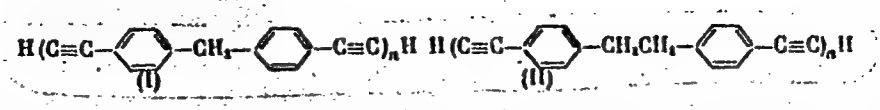


Card 2/3

L 28441-66

ACC NR: AP6017878

Oligomers I and II;



were prepared earlier. Owing to the presence of a methyl substituent, oligomer IV, unlike I, was almost fully soluble in pyridine. Oligomer IV was obtained in the form of light-yellow films; it did not fuse up to 500C but darkened at 340C. Oligomer VII had apparently a tridimensional network structure; a dark brown powder, it was much darker in color than I and IV. VII gave a narrow intense EPR signal, indicating the presence of conjugation despite the formal disruption of conjugation by the CH groups present between phenyl rings. A number of monomers, mono-, di-, and triacetylene derivatives of diphenyl-methane and -ethane were also prepared. [SM]

SUB CODE: 07/ SUBM DATE: 25Dec63/ ORIG REF: 002/ OTH REF: 001
ATD PRESS: 5105

Card 3/3

L 29386-66 EWP(j)/EWT(m)/T IJP(c) RM
ACC NR: AP6017879 (A) SOURCE CODE: UR/0062/66/000/005/0909/0914

AUTHOR: Kotlyarevskiy, I. L.; Bardamova, M. I.; Shishmakova, T. G.

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department, Academy of Sciences SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Highly unsaturated polymers. Communication 17. Synthesis of mono- and di-ethynylvinyl derivatives of benzene and oxidative condensation thereof

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 5, 1966, 909-914

TOPIC TAGS: organic semiconductor, semiconducting polymer, polyacetylene, polyvinyleneacetylene

ABSTRACT: New unsaturated polymers V (see below) with alternating double and triple bonds in the backbone have been prepared by a new route. It is noted that the polymers previously prepared by the authors,

$$[(C\equiv C)_m - Ar - (C\equiv C)_m]_n,$$

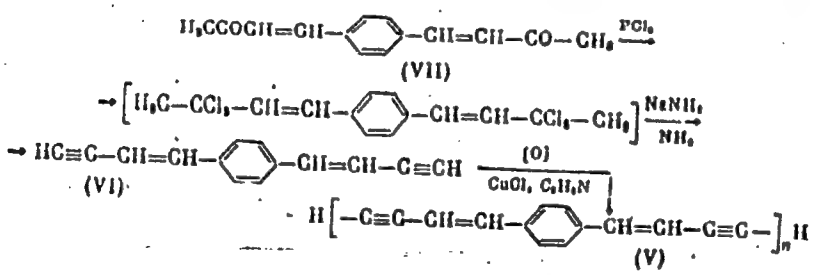
where m = 1 and 2, contained diacetylene and tetraacetylene bonds in the backbone. To determine the difference between the effect on properties of double and triple bonds, it was of interest to prepare such polymers in which triple bonds would be

Card 1/3 UDC: 547.362+542.952

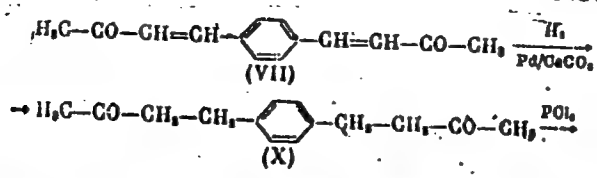
L 29386-66
ACC NR: AP6017879

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825410006-5

partly or fully replaced by double bonds. Polymer V was prepared as follows:



Polymer V was a brown powder. It gave a narrow, intense EPR signal which indicates continuous conjugation in the backbone. Elemental analysis and IR spectroscopy indicated the presence of some carbonyl substituents, apparently due to hydration of end-group triple bonds. To determine the effect on properties of the removal of the double bonds in V, polymer IX was prepared as follows:



Card 2/3

L 44191-66 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6013281 (A) SOURCE CODE: UR/0413/66/000/008/0079/0079 57 B

INVENTOR: Kotlyarevskiy, I. L.; Zanina, A. S.; Gusenkova, N. M.; Sokolov, I. Ye.; Cherepov, Ye. I.

ORG: none

TITLE: Preparation of oligomers. Class 39, No. 180797 [announced by the Institute for Chemical Kinetics and Combustion, Siberian Branch, Academy of Sciences, SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 79

TOPIC TAGS: oligomer, polyarylene, polyacetylene, polycondensation, heat resistant material, dielectric strength

ABSTRACT: This Author Certificate introduces a method for preparing an oligomer of the polyarylene polyacetylene series by oxidative polycondensation of diacetylene. To obtain soluble polymer compounds with high heat resistance and dielectric strength, 2, 2-bis-(4' -methoxy-3' -ethynylphenyl)-propane is suggested as the diacetylene. [LD]

SUB CODE: 07,11/ SUBM DATE: 29Mar65/

Card 1/1 amp

L 45725-66 EWT(m)/EWP(i)/T RM
ACC NR: AP6024413 (N) SOURCE CODE: UR/0020/66/169/001/0111/0113

AUTHOR: Dilov, A. A.; Slinkin, A. A.; Rubinshteyn, A. M.; Kotlyarevskiy, I. L.; Shvartsberg, M. S.; Andriyevskiy, V. N.; Zanina, A. S.; Shergina, S. I. 56 B

ORG: Institute of Organic Chemistry im. N. D. Zelinskiy, Academy of Sciences, SSSR (Institut organicheskoy khimii Akademii nauk SSSR); Institute of Chemical Kinetics and Combustion, Siberian Branch, Academy of Sciences, SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Influence of disturbance of conjugation on the properties of semiconducting polymers

SOURCE: AN SSSR. Doklady, v. 169, no. 1, 1966, 111-113

TOPIC TAGS: semiconducting polymer, conjugated polymer, semiconductor conductivity

ABSTRACT: It has been frequently reported in the literature that the disturbance of conjugation in organic semiconductors as a result of either noncoplanarity of aromatic rings or introduction of aliphatic, oxygen, or sulfur bridges into the conjugated chain lowers the electric characteristics. In the present paper, the intensity of the influence of these different types of conjugation disturbances was compared in a series of polymers of a single class, the polyarylenepolyacetylenes, whose electrical conductivity σ and ESR spectra were measured. The introduction of various groups disturbing the conjugation into the conjugated chain was found to hinder the processes of

Card 1/2 UDC: 541.67

ACC NR: AP6025401

SOURCE CODE: UR/0062/66/000/007/1272/1275

AUTHOR: Shvartsberg, M. S.; Andriyevskiy, V. N.; Kotlyarevskiy, I. L.

ORG: Institute of Chemical Kinetics and Combustion, Siberian Department, Academy of Sciences, SSSR (Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Synthesis of some di- and tetraacetylenic amines

SOURCE: AN SSSR. Izv. Ser khim, no. 7, 1966, 1272-1275

TOPIC TAGS: diacetylenic amine, alkyl arylamino diacetylene, tetraacetylenic amine, acetylene compound, amine, chemical synthesis

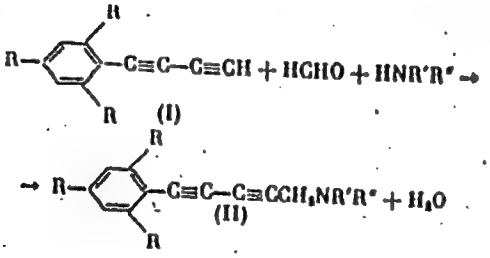
ABSTRACT:

The physiologically active acetylenic amines are usually obtained in low yields by the time-consuming Mannich reaction. It was found that in the presence of Cu_2Cl_2 at 40—80°C, depending on the diamine present, aryl-diacetylenes react with paraform and secondary amines to form 1-N,N-dialkylamino-5-aryl-2,4-pentadiynes:

Card 1/4

UDC: 542.91+547.333+547.362

ACC NR: AP6025401 APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825410006-5

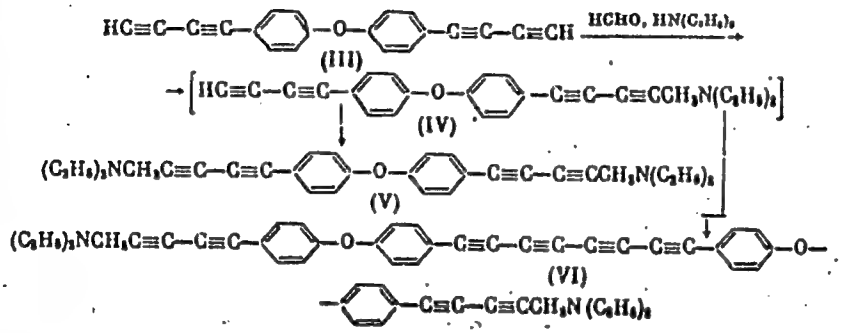


where: R, R', and R" are H or C_2H_5 (see table):

Card 2/4

ACC NR: AP6025401

Under the same conditions, condensation of p,p'-bis(butadiynyl)diphenyl oxide with paraform and diethylamine gave the tetraacetylenic amines V (mp 52—52.5°C) and VI (mp 150—152°C):



Orig. art. has: 1 table. [W.A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 22Dec65/ ORIG REF: 004/ OTH REF: 001/

Card 4/4

ACC NR: AR6022467

AUTHOR: Kotlyarevskiy, L. N.

TITLE: Methods of flight and joining photographs for large scale aerial topographic surveys

SOURCE: Ref. zh. Geofiz, Abs. 3L102

REF SOURCE: Byul. nauchno.-tekhn. inform. Vses. n.-i in-t ekon. mineral'n. syr'ya i geologorazved. rabot, no. 1(54), 1965, 48-50

TOPIC TAGS: aerial survey, aerial photography, navigation aid

TRANSLATION: The essential feature of the proposed technique is the use of aerial networks for topographic purposes as well as for a preliminary orientation. In such cases, the network should be worked out prior to the initiation of field work. The net-works should be drawn on the same scale as the proposed scale of mapping, or somewhat larger. The gaps between the available aerial networks could be 4 to 10 km. After mounting the aerial networks, the gaps are filled from existing topographic maps. The composite is then cut along the boundaries of the trapezia. Maps so prepared may be satisfactorily used by a navigator. L. Margevich.

SUB CODE: 08,01

UDC: 528.72:550.830

Card 1/1

KOTLYAREVSKIY, K.I., professor; GORSHELEVA, L.S., KHOZAK, L.E.

Effect of X rays on the higher nervous activity of animals (white rats) Med.rad. 1 no.3:11-19 My-Je '56. (MIRA 9:10)

1. Iz Instituta vysshey nervnoy deyatel'nosti (dir. - deystvitel'nyy chlen AMN SSSR prof. A.G. Ivanov-Smolenskiy) AN SSSR.
(ROENTGEN RAYS, eff.
on higher nervous funct. in white rats)
(CENTRAL NERVOUS SYSTEM, eff. of drugs on radiations on x-ray eff. on higher nervous funct. in white rats)

KOTLYAREVSKIY, K.V., inzh. (deceased)

Hidden potentialities for making savings in planed veneer. Der.prom. 9 no.12:5-6 D '60. (MIRA 13:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Veneers and veneering)

KOTLYAREVSKIY, K.V.[deceased]; KOTLYAREVSKAYA, G.A.; SMIRNOV, A.V., red.; SHENDAREVA, L.V., tekhn. red.; MILIKESOVA, I.F., tekhn. red.

[Economical expenditure of veneer] Ratsional'nyi raskhod stroganoi fanery. Moskva, TSentr.in-t tekhn. informatsii i ekonomicheskikh issl. po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1962. 43 p. (MIRA 16:9)
(Veneers and veneering)

KOTLYAREVSKIY, L. I.

"Experimental Investigation of the Pathophysiological Mechanisms of the Action of a Manganese Compound on the Activity of the Central Nervous System; Particularly, the Cerebral Cortex of Animals." Sub 13 Mar 51, Central Inst for the Advanced Training of Physicians.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

KOTLYAREVSKIY, L.I.

Effect of experimental disruption of the higher nervous function on the course of neurointoxication in animals. Zh. vysshei nerv. deiat. Pavlova 1 no.3:405-422 May-June 1951. (CIML 23:2)

1. Department of the Pathophysiology of Higher Nervous Activity, Institute of Higher Nervous Activity, Academy of Sciences USSR.

KOTLYAREVSKIY L. I.

PS 194T82

USSR/Medicine - Bulbocapnine Jul/Aug 51

"Disturbances of Higher Nerve Activity on Poisoning of Animals by Bulbocapnine," L. I. Kotlyarevskiy, Div of Pathophysiol of Higher Nervous Activity, Inst of Higher Nervous Activity, Acad Sci USSR

"Zhur Vyssh Nerv Deyat" Vol I, No 4, pp 579-602

Expts were made with bulbocapnine introduced into white rats and dogs to test effects on the nervous system. Results in dogs are: quickly passing stimulation followed by immobilization in flexed position (arched back) and later sleeplike

194T82

USSR/Medicine - Bulbocapnine (Contd) Jul/Aug 51

condition. Severity of the effect and duration of the condition varies in balanced and unbalanced animals.

194T82

KOTLYAREVSKIY, L.I.

Method of production of motor conditioned reflexes in certain small animals (white rats and guinea pigs). Zh. vysshei nerv. deiat. 1 no. 5:753-761 Sept-Oct 1951. (CIML 23:3)

1. Department of the Pathophysiology and Therapy of Higher Nervous Activity of the Institute of Higher Nervous Activity, Academy of Sciences USSR.

USSR/Medicine - Toxicology Jul/Aug 52

234T45

"Impairment of Higher Nervous Activity in Animals, Caused by the Action of Various Poisons, and Experimental Therapy of This Type of Impairment," L. I. Kotlyarevskiy, Inst of Higher Nervous Activity, Acad Sci USSR

"Zhur Vyssh Nerv Deyat" Vol 2, No 4, pp 582-591

Intoxication produces, in the cortex of the large hemispheres, symptoms of defensive, protective inhibition expressed in abatement of conditioned reflexes, prolongation of their latent period, development of

234T45

phasal symptoms in the cortex, and, finally, in complete disappearance of conditioned reflexes. The course that intoxication takes in majority of cases depends on typological characteristics of the higher nervous activity of animals. Materials presented are 1st exptl steps that deal particularly with sleep therapy in cases of impairment of higher nervous activity caused by toxic substances. Although results obtained were pos, evidence for its use is not conclusive to consider using it in place of established methods.

234T45

KOTLYAREVSKIY, L. I.

KOTLYAREVSKIY, L.I.

Pavlovian theory on the higher nervous function. Med. sestra, Moskva no. 12:3-7 Dec 1952. (CIML 23:3)

1. Doctor Medical Sciences.

KOTLYAREVSKIY, L.I.

LEPESHINSKAYA, O.B., professor; USIYEVICH, M.A., professor; ASRATYAN, E.A., professor; SMIRNOV, A.I., professor; FILIPPOVICH, S.I., doktor meditsinskikh nauk; VOLOKHOV, A.A., professor; FILIMONOV, I.N., professor; SNYAKIN, P.G., professor; CHERNIGOVSKIY, V.N., professor; SPERANSKIY, A.D., akademik; DOLIN, A.O., doktor meditsinskikh nauk; KOTLYAREVSKIY, L.I., professor; NEGOVSKIY, V.A., professor; KASATKIN, N.I., professor; STEL'CHUK, I.V., professor; YEGOROV, B.G., professor; BAKULEV, A.N., professor; SMIRNOV, L.I., professor; USPENSKIY, V.N., redaktor; PETROV, S.P., redaktor.

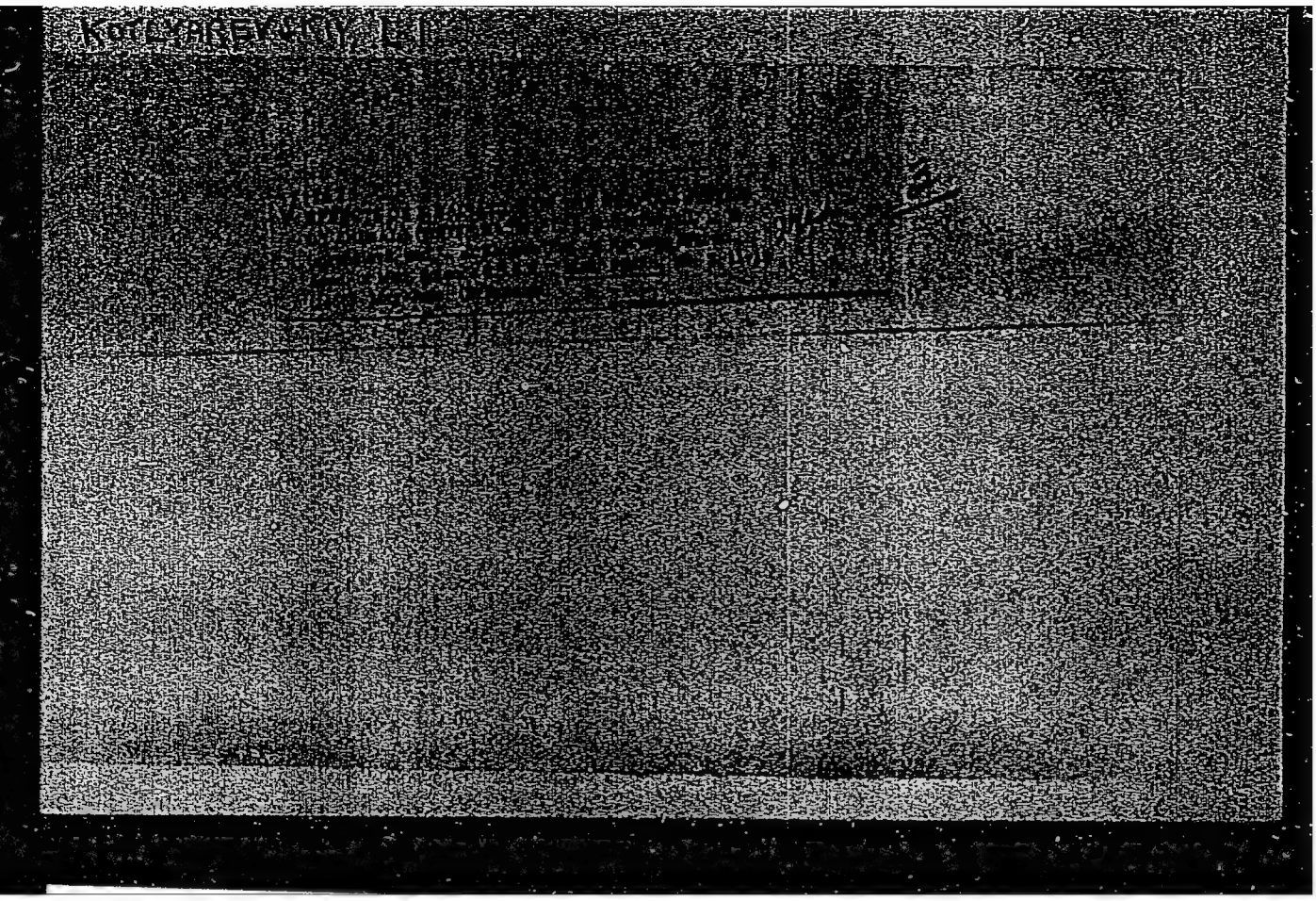
[Teachings of I.P.Pavlov in theoretical and practical medicine] Uchenie I.P.Pavlova v teoreticheskoi i prakticheskoi meditsine. Vol.2. Moskva, Izd-vo Ministerstvo zdravookhraneniia SSSR, 1953. 611 p. (MLRA 7:3)

1. Deystvitel'nyy chlen AMN SSSR (for Lepeshinskaya, Chernigovskiy and Bakulev). 2. Chlen-korrespondent Akademii nauk SSSR (for Asratyan). 3. Chlen-korrespondent AMN SSSR (for Smirnov, Filimonov, Yegorov and L.I.Smirnov). 4. Moscow. TSentral'nyy institut usovershenstvovaniya vrachey. (Pavlov, Ivan Petrovich, 1849-1936) (Nervous system) (Physiology)

KOTLYAREVSKIY, L.I.

USSR

The influence of chronic poisoning by manganese dioxide on the performance of the higher nervous system in animals. L. I. Kotlyarevskii. *Zhur. Vyssh. Nervnoi Deyatel. im. I. P. Pavlova* 4, 662–73(1954).—The method of conditioned reflexes revealed that long before the appearance of any symptoms of intoxication by MnO_2 there is an interruption or alteration in the interrelation between brain function and development of protective inhibition, the latter being the earliest manifestation of protective reaction of the central nervous system to the entry into the organism of a toxic agent. MnO_2 intoxication appears to affect the locomotive centers of the nervous system, governing the regulation of a complex system of skeletal musculature and locomotion activity of the animal. MnO_2 intoxication does not affect the animal permanently, since the interruption of MnO_2 administration, followed by rest, completely restores the functions to normal. I. A. Stekol



KOTLYAREVSKIY, L.I.

Methods for studying conditioned motor food reflexes in animals. Trudy Inst.vys.nerv.deiat. Ser.patofiziol. 3:23-28 '57. (MIRA 10:8)
(CONDITIONED RESPONSE)

T-10

USSR/Human and Animal Physiology - Nervous System.
Higher Nervous Activity. Behavior.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32209

Author : Kotlyarevskiy, L.I.

Inst :

Title : New Method of Investigation of Conditioned Motor-Food Reflexes in Dogs.

Orig Pub : Tr. In-ta vyssh. nervn. deyat-sti AN SSSR, ser. patofiziol., 1957, 3, 29-32.

Abstract : The method provides registration of reflex movements accomplished by a limited group of muscles without fixation of the animal on a bench. In the course of several days, the dog was trained to jump up and stand on the bench. Over the location of the feeder, a transparent box was placed. The dog was trained to push the box with his muzzle. By the precedence of indifferent stimuli to the approach of the feeder, positive and inhibiting reflexes were

Card 1/2

USSR/Human and Animal Physiology - Nervous System T-10

KOTLYAREVSKIY, L. I.

"On certain peculiarities of the higher nervous activity of white rats under psysiological and pathological conditions".

report presented at a Joint Session of the Biological Dept. of AN USSR and Biological and Medical Depts. AN Gruziya SSR, Tbilisi, 28- Sept 3- October 1957. Vestnik Akad. Nauk SSSR, 1958, Vol. 28, No. 1, pp. 121-125. (author Dzidzishvili, N. N.)

KOTLYAREVSKIY, L.I., prof.

Status and prospects of the experimental treatment of the problem of the pathology of the higher segments of the central nervous system in animals. Trudy Inst.vys.nerv.deiat.Ser. patofiziol. 6:20-26 '59. (MIRA 12:10)
(NERVOUS SYSTEM--DISEASES)

KOPLYAREVSKIY, L.I.

Nerve mechanisms of higher central nervous system disorders in animals (white rats) in streptococcal intoxication. Trudy Inst. vys.nerv.deiat.Ser.patofiziol. 6:29-37 '59. (MIRA 12:10)
(NERVOUS SYSTEM) (STREPTOCOCCAL INFECTIONS)

KOTLYAREVSKIY, L.S.

Neural mechanisms of the influence of prolonged sleep on higher nervous activity impaired by experimental streptococcal intoxication in animals (white rats). Trudy Inst.vys.nerv.deiat.Ser. patofiziol. 6:209-216 '59. (MIRA 12:10)
(NERVOUS SYSTEM) (SLEEP--THERAPEUTIC USE) (STREPTOCOCCAL INFECTIONS)

KOTLYAREVSKIY, Lev Izrailevich; GASANOV, U.G., red. izd-va; ASTAF'YEVA, G.A., tekhn. red.

[Mechanisms of the action of manganese on the central nervous system of animals] Mekhanizmy deistviia margantsa na tsentral'nuiu nervnuiu sistemu zhivotnykh. Moskva, Izd-vo Akad. nauk SSSR, 1961. 198 p. (MIRA 14:8)

(MANGANESE—TOXICOLOGY) (NERVOUS SYSTEM)

KOTLYAREVSKIY, L.I.

Nervous mechanisms of the activity of the higher sections of the central nervous system in white rats. Trudy Inst. vys. nerv. deiat. Ser. patofiziol. no.9:3-15 '61. (MIRA 15:4)
(CONDITIONED RESPONSE)

KOTLYAREVSKIY, L.N., student V kursa.

The history of the development and operational principle of aerial magnetometers. Sbor.stud.rab. SAGU no.12:52-54 '55. (MLRA 9:5)
(Magnetometer)

S/169/62/000/007/056/149
D228/D307

AUTHORS: Kotlyarevskiy, L. N. and Akhmatov, P. G.

TITLE: Effectiveness of aeromagnetic surveying in geologic mapping, prospecting for iron ore deposits, and solving other problems in Uzbeskistan (Discourse theses)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 29, abstract 7A190 (V sb. Sostoyaniye i perspektivy razvitiya geofiz. metodov poiskov i razvedki polezn. iskopayemykh, M., Gostoptekhizdat, 1961, 527-528)

TEXT: Aeromagnetic surveying in Uzbekistan allows Paleozoic structures beneath sedimentary deposits to be mapped and the sites of large intrusives to be defined more precisely. The effectiveness of aeromagnetic surveying for seeking local anomalies, related to iron ore deposits, has been confirmed by many examples; nevertheless, it encounters a number of limitations, caused by the magnetic field's complex morphology and by the procedure's imperfect application. The effectiveness of aeromagnetic surveying is lowest

Card 1/2

S/169/63/000/002/109/127
D263/D307

AUTHORS: Kotlyarevskiy, L. N. and Akhmatov, P. G.

TITLE: The effectiveness of aeromagnetic surveying in the search for iron ore deposits, in geological charting, and in solution of other problems in Uzbekistan

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1963, 29, abstract 2D176 (Byul. nauchno-tekhn. inform. M-vo geol. i okhrany nedr SSSR, 1962, no. 1 (35), 82-85)

TEXT: The main results are given of a large scale aerophysical survey of eastern Uzbekistan in search for iron ore deposits. It is concluded that of the areas studied the most promising for iron ore are magnetic anomalies of intensity greater than 300 γ, associated with the zones of contact of the upper Varisek granodiorites with the carbonate deposits of the Carboniferous. Information is given of main anomalies discovered by magnetic exploration. A comparison is made of results of aeromagnetic surveys made at various scales (1:50,000 and 1:200,000), carried out over the same areas; this

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The effectiveness of ...

S/169/63/000/002/109/127
D263/D307

showed the advisability of supplementing a 1:200,000 survey with a survey made on a larger scale. It is noted that in the quantitative interpretation of magnetic anomalies, caused by sheetlike magnetic deposits 10 - 20 m thick and discovered by aeromagnetic surveys with the АСГМ-25 (ASGM-25) station, the errors reach 500 - 1000%. These errors are mainly due to the inertia of the aeromagnetic station.
[Abstracter's note: Complete translation.]

Card 2/2

KOTLYAREVSKIY, I.N.; KRUPIN, I.G.

Using the high-precision AM-13 aeromagnetometer in the solution of geological mapping problems in Uzbekistan. Razved. i okh. nedr. 30 no.6:35-39 Je '64. (MIRA 17:10)

1. Uzbekskiy geofizicheskiy trest.

L 21861-65 EWT(1)/FCC/EEC(t)/EWA(h) Pe-4/Pt-4/Pab GW

ACCESSION NR: AR5003630 S/0169/64/000/011/D023/D023

SOURCE: Ref. zh. Geofizika, Abs. 11D150

AUTHORS: Kotlyarevskiy, L. N.; Kremnev, L. G.

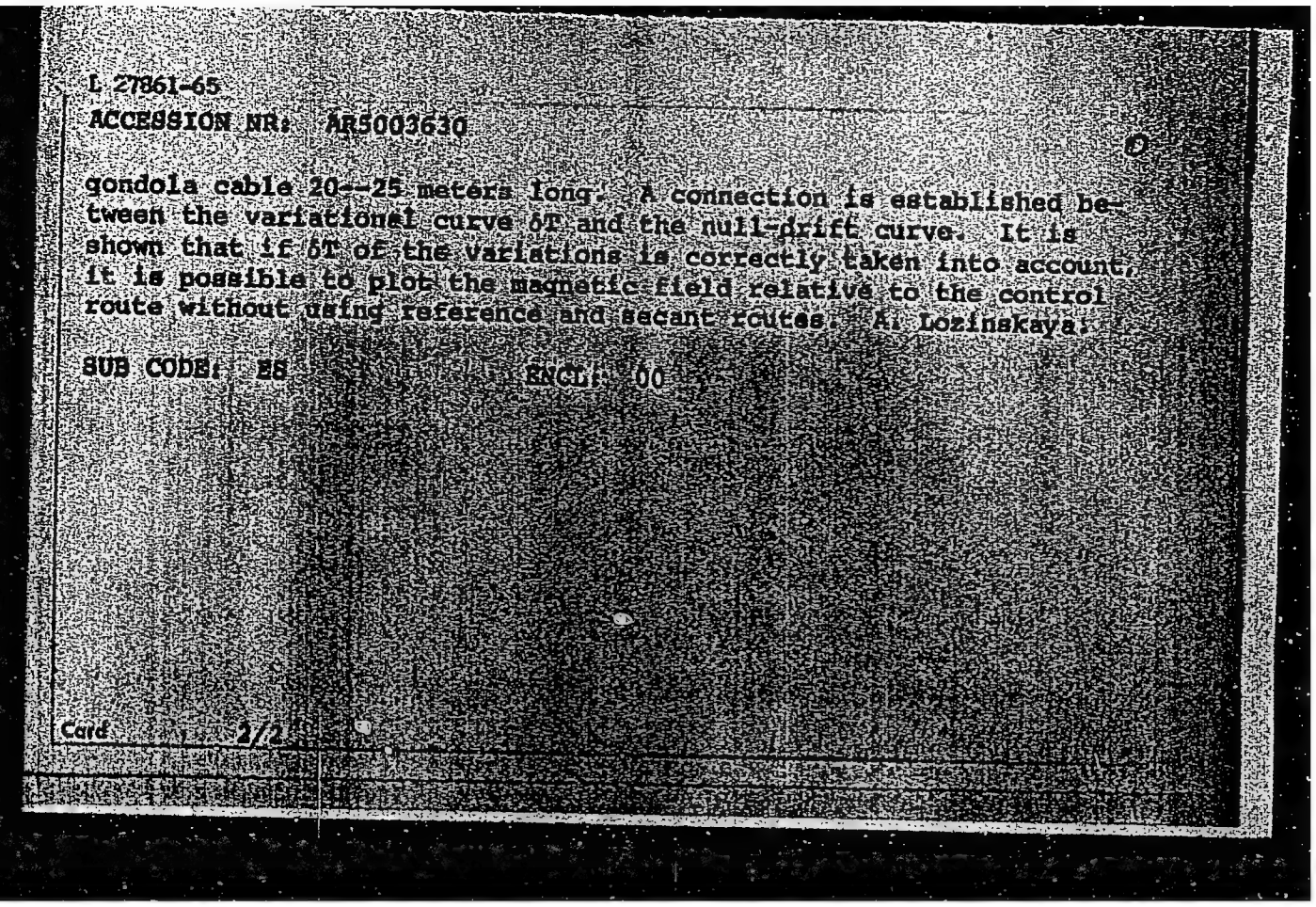
TITLE: Results of experiments with the AM-13 high-precision aeromagnetometer

CITED SOURCE: Sb. Geofiz. priborostr., Vyp. 18. L., Nedra, 1964, 115-118

TOPIC TAGS: magnetometer, aerial magnetic surveying/AM-13

TRANSLATION: A brief report is presented of experimental work with the AM-13 aeromagnetometer, carried out in 1960--1961 by the aeromagnetic party of Uzbekskiy geofizicheskiy trest (Uzbek Geophysical Trust). The investigations have shown that in order to exclude the deviation noise it is advantageous to do the measurements with a

Card 1/2



L 27861-65
ACCESSION NR: AR5003630

gondola cable 20--25 meters long. A connection is established between the variational curve δT and the null-drift curve. It is shown that if δT of the variations is correctly taken into account, it is possible to plot the magnetic field relative to the control route without using reference and secant routes. Ai Lozinskaya.

SUB CODE: ES ENCL: 00

Card 2/2

TAL'-VIRSKIY, B.B.; KOTLYAREVSKIY, L.N.; KREMNEV, I.G.

New data on the structure of the basement in the Fergana intermontane depression. Uzb. geol. zhur. 8 no.5:46-52 '64. (MIRA 18:5)

1. Uzbekskiy geofizicheskiy trest.

KOTLYAREVSKIY, M.L., dotsent

One-stage fixation of the pelvic fundus and sphincter in rectal prolapse. Vest.khir. 76 no.7:119-123 Ag '55 (MLRA 8:10)

1. Iz Mariyskoy respublikanskoy bol'nitsy (gl.vrach L.N.Molchanov)

(RECTUM, dis.
prolapse, surg.one-stage, of pelvic fundus & sphincter)

ZAYTSEV, N.; BULANOV, N.; KOTLYAREVSKIY, N.

Mechanized production line for the preparation of sausage filling.
Mias.ind.SSSR 33 no.2:14-15 '62. (MIRA 15:5)
(Sausages) (Assembly-line methods)

L 14398-63 EWT(m)/BDS AFFTC JD

ACCESSION NR: AP3003050 S/0170/63/000/006/0068/0073

AUTHOR: Verkhivker, G. P.; Zubatov, N. O.; Kotlyarevskiy P. A. (Odessa)

TITLE: Diagram of products of gas combustion with allowance for dissociation

SOURCE: Inzhernerno-fizicheskiy zhurnal, no. 6, 1963, 68-73

TOPIC TAGS: Saratov natural gas, I-S diagram

ABSTRACT: An I-S diagram is presented for the combustion products from Saratov natural gas for the ranges 300 to 305° K and 0.1 to 5 million newtons/sq. meter. The products are assumed to behave as an ideal gas; the dissociation region is covered by means of an approximate method, not described in detail [Nikolayev B. A. (Termodinamicheskiy raschet raketnykh dvigateley. Oborongiz, 1960)]. The elementary composition is 0.711 C, 0.231 H, 0.05426 N, and 0.00374 O; the excess air factor is 1. The calorific value of the gas is 46,848.37 kilojoules/kg. The composition of the gas in terms of major hydrocarbons is also used. Most of the paper is taken up with a method of estimating the error of the diagram by reference to the enthalpy at high temperatures. It is concluded

Card 1/3

L 14398-63
ACCESSION NR: AP3003050

that the total error from all scurces is not more than 3 percent at the highest temperatures and is usually much less. Original article has: 2 figures and 10 formulas.

ASSOCIATION: Tekhnologicheskiy institut imeni M. V. Lomonosova, Odessa (Technological Institute)

SUBMITTED: 20Dec62 DATE ACQ: 26Jul63 ENCL: 01

SUB CODE: PH NO REF SOV: 003 OTHER: 000

Card 2/3 2

KESSEL'MAN, P.M.; KOTLYAREVSKIY, P.A.; VOLOSHIN, A.P.

Equation of state and thermodynamic properties of molecular nitrogen. Inzh.-fiz. zhur. 8 no.1:35-40 Ja '65. (MIRA 18:5)

1. Tekhnologicheskiy institut imeni Lomonosova, Odessa.

KOTLYAREVSKIY, S.

Warehouse association and the centralized delivery of goods in Voronezh. Sov. torg. 33 no.6:24-25 Je '59. (MIRA 12:8)
(Voronezh--Warehouses)

KOTLYAREVSKIY, V., sadovod-opytnik (Khar'kov, poselok Nauchnyy)

Mulching orchards with chaff. Nauka i pered.op.v sel'khoz. 9 no.8:45-46 Ag '59. (MIRA 12:12)
(Fruit culture) (Mulching)

10.71000 also 1413,3309

31641
S/207/61/000/006/017/025
A001/A101

AUTHOR: Kotlyarevskiy, V. A. (Moscow)

TITLE: Mechanical characteristics of low-carbon steel subjected to impulsive loading with allowance for delay yield and visco-plastic properties

PERIODICAL: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 6, 1961, 145-152

TEXT: The author attempts to establish mechanical characteristics for low-carbon steel with explicitly manifested yield region, possessing the property of delay yield at arbitrary conditions of stress, on the basis of the theory of dislocations with allowance for visco-plastic properties of steel. The concept of delay time is defined as the time during which steel preserves its elastic state in spite of undergoing stresses exceeding the statical yield point. The formulae for determination of delay time are given for the case of a constant rate of strain and stress and for the case of an instantaneously applied constant stress. The theoretical formulae derived are compared with empirical formulae for dynamical yield point of steels St. 3 and St. 5, and

Card 1/2

24 1300

S/207/62/000/003/013/016
I028/I228

AUTHOR: Kotlyarevskiy, V. A. (Moscow)

TITLE: Elastic-viscous-plastic waves in a substance with lagging fluidity

PERIODICAL: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 3, 1962, 81-87

TEXT: The following two cases of wave propagation in an elstic-viscous-plastic substance with lagging fluidity are analysed mathematically:

a) Propagation of a plane wave in a half-infinite undisturbed prismatic pivot, to whose end section is applied an elongating dynamic stress. It is found that a discontinuity of the velocity of deformation takes place at the moving boundary $x = a(t-\tau)$ of the viscous-plastic region, where τ = the time lag, $a = \sqrt{\frac{k}{\rho}}$

b) Deformation of a pivot under the action of a variable transversal dynamic load beyond the limit of dynamic fluidity. The obtained equations are integrated in this case by means of computers.

The author thanks S. S. Grigoryan and N. I. Polyakov for their comments. There are 9 figures.

SUBMITTED: August 15, 1961

JA

Card 1/1

BONDARENKO, V.V.; KOTLYAREVSKIY, V.V.

Knife for cutting slots in paperboard [Suggestion by V.V. Bondarenko, V.V. Kotliarevskii]. Rats. i izobr. predl. v stroi. no.6:66-67 '58. (MIRA 11:10)

(Paperboard)

KOTLYAROV, A. F.

USSR/Engineering Jul 48
Conveyers
Peat

"Peat Supply With a Car Unloading Conveyer at Electric Stations," I. I. Kostin, Cand Tech Sci, A. F. Kotlyarov, A. S. Gel'man, Engineers, 4 pp

"Mekh Trud i Byazh Rabot" No 7

Describes system used successfully at a USSR power station. Recommends new method as it does away with transferring peat from wide-gauge to narrow-gauge cars. It releases 350 rail cars and 63 workmen per power station for other uses. Suggests application of this conveyer method at other power stations operating on peat fuel. Gives sketches and cross-section plans of the instaliation.

PA 33/49T50

KOTLYAROV, A.M.

YUDIN, Ye.Ya.; KOTLYAROV, A.M.

Creating a bit for drilling superhard rocks. Neft. khoz. 34 no.12: 17-21 D '56. (MLRA 10:8)

(Boring machinery)

KOTLYAROV, Aleksandr Mikhaylovich; IVANOV, Ye.M., redaktor; KIRSHENBAUM, P.I., redaktor; SVYATITSKAYA, K.P., vedushchiy redaktor; POLOSINA, A.S., tekhnicheskiy redaktor

[Underground boring machine with hydraulic transformer] Podzemno-burovoi stanok s gidravlicheskim preobrazovatelem. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1957. 61 p. (Boring machinery) (MLRA 10:7)

KOTLYAROV, A.I.

Rig for underground drilling. Mekhanik 2 no.7:22-25 Jl '57.
(MIRA 10:8)

1. Glavnyy konstruktorskogo byuro Ufimskogo mekhanicheskogo zavoda.
(Boring machinery)

ACC NR AR6032152 SOURCE CODE: UR/0169/66/000/006/D013/D013

AUTHOR: Kotlyarov, A. M.; Kolik, A. L.; Tsaregradskiy, V. A.; Urazayev, B. M.; Koristoshevsaya, T. I.; Al'mukhanbetov, D. V.

TITLE: Geophysical investigation of unexplored areas of the Dzhezkazgan-Sarysuysk region

SOURCE: Ref. zh. Geofizika, Abs. 6D90

REF SOURCE: Sb. Geofiz. issled. v Kazakhstane. Alma-Ata, Kazakhstan, 1965, 120-126

TOPIC TAGS: petroleum geology, geologic exploration, oil, seismic logging, electric logging, geophysical exploration, oil deposits/Dzhezkazgan

ABSTRACT: Data obtained on the physical properties of rock in laboratory studies of samples and in electrical and seismic logging are presented. Geological and geophysical analyses showed that intense positive anomalies extending linearly along the meridional (up to 1000 γ) are formed by iron quartzites, porphyritoides, and epidote and amphibole shales of the Karsakpay series. The area distribution

Card 1/2 UDC: 550.830(574.5)

ACC NR: AR6032152

of the electrical properties of the rock had not been sufficiently studied. The study of the polarization characteristics of rock and ore was begun only in 1961. Residual magnetization was studied principally in extruded and metamorphic rock. Geophysical investigations showed a block structure for the Dzhezkazgan trough—the synclinal region situated to the north of the Dzhezkazgan deposits. Geophysical studies and drilling operations revealed a rather wide distribution of halogenic formations, whose age was determined roughly as Permian. Thick Lower Paleozoic strata and overlying rocks with oil-bearing characteristics, salt dome tectonics, indications of oil in the gaseous and liquid phase in the Permian cross-section, and favorable structure, all indicate that the Dzhezkazgan-Sarysuysk trough is an oil-bearing region. Yu. Kaznacheyeva. [Translation of abstract]
[SP]

SUB CODE: 08/

Card 2/2

KOTLYAROV, A.M.

Hydraulic device for the automatic control of the feed of a drilling tool and the "interception" of a clamping chuck. Biul.nauch.-tekh. inform VIMS no.1:94-95 '63. (MIRA 18:2)

KOTLYAROV, A.M.; TSAREGRADSKIY, V.A.; KOLIK, A.L.

Development of halogenous formations in the Dzhezkazgan-Saryesu Basin and the outlook for its oil and gas bearing capacity. Vest. AN Kazakh. SSR 21 no.6:53-59 Je '65. (MIRA 18:7)

KOTLYAROV, A. S., inzh.

Attachments for multiple milling. Mashinostroenie no.5:80 S-O '62. (MIRA 16:1)

1. Leningradskiy gosudarstvennyy optikomekhanicheskiy zavod.

(Milling machines--Attachments)

LISIN, B.V., podpolkovnik; KARDASH, V.M., inzh.-podpolkovnik; PEREDEL'SKIY, E.P., inzh.-podpolkovnik; KOTLYAROV, D.M., podpolkovnik; BUDNIKOV, F.A., podpolkovnik; OKUNEV, Yu.K., podpolkovnik, red.; SOLOMONIK, R.L., tekhn.red.

[Increasing the length of time between overhauls for motor vehicles] Puti i sposoby povysheniia mezhremontnykh probegov mashin. Moskva, Voen.izd-vo M-va obor.SSSR, 1960. 70 p.

(MIRA 13:6)

1. Russia (1923- U.S.S.R.) Avtotraktornoye upravleniye. 2. Prepodavateli Voyennogo avtomobil'nogo uchilishcha (for Lisin, Kardash, Peredel'skiy, Kotlyarov, Budnikov).

(Motor vehicles--Maintenance and repair)